

Job Title: CIVIL ENGINEER V - GEOMETRICS ENGINEER - IPR#46397

Agency : Department of Transportation

Closing Date/Time: 04/24/2023

Salary: \$6,445 - \$10,210 Monthly

Job Type: Salaried Full Time

County: Peoria

Number of Vacancies: 1

Plan/BU: NR916 - Protech Teamsters

This position is covered by the Revolving Door Prohibition Policy.

This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.

All applicants who want to be considered for this position MUST apply electronically through the illinois.jobs2web.com website. State of Illinois employees should click the link near the top left to apply through the **SuccessFactors employee career portal.**

Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire a Geometrics Engineer.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

The department offers extensive training and career advancement opportunities. Employees also receive a robust benefit package including:

- Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

Job Responsibilities

This position is responsible for the interpretation and implementation of policies and procedures governing geometric design, capacity and access control of highways; and for the design of intersections, interchanges, rest areas, and weigh stations. This position is also responsible for the supervision of preparation of project and design studies and contract plans and documents during peak workloads. Design, review, and approval are performed by this position.

Subordinate Personnel: Direct 2; Seasonal 1-2

Annual Program: Consultants 2-6; Intersections 50-100; Interchanges 3-7; Rest Areas/Weigh Stations 2-4

Annual Project Value: \$60 to \$120 Million

This position reports to the Studies and Plans Engineer. Reporting directly to this position is Assistant Geometrics Engineer and the Geometrics Technician.

This position is accountable for the development of intersection/interchange geometrics that conform to State Policy and for recommending appropriate deviation from State Policy to the central office. The incumbent has responsibility and authority for determining whether or not central office concurrence is required prior to the inclusion of geometrics in a project report for presentation to the public at informational meetings and/or public hearings. This position is required to create designs which are cost effective and often unique, using sound principles of value engineering and judgment. This position is also responsible for review and approval of private and/or commercial development plans to insure that acceptable levels of operations with safety potential are maintained on the State and local systems. Certification by the Project Development Engineer of the central office Bureau of Design and Environment provides for this position to approve, without central office concurrence, intersection design studies which do not deviate from policy.

The greatest challenge for the incumbent is to maintain a state-of-the-art knowledge of appropriate local, state, federal and national policies and evaluate pertinent research and field experience with a view toward improvement of current practices. A typical problem for the incumbent is to establish cost-safety-effectiveness procedures for the development of feasible improvements while mitigating the impact of the resulting improvements.

(Job Responsibilities continued)

This position is personally accountable for the following functions: general and geometric highway design, accident investigation studies, access control, pavement, shoulder, median and right-of-way widths, horizontal and vertical alignments, earth slopes, design speeds, sight distance, super elevation, capacity analysis for intersections and interchanges, and cost estimates; providing advice and guidance to consultants, county and municipal engineers in the preparation of geometrics, cross-sections, alignments, slopes, etc. These functions are highly innovative and have specific objectives of fiscal restraints, cost effectiveness and safety. The incumbent also serves as a Project Manager for the development of contract documents and plans for projects involving safety features. This position requires frequent travel throughout the district to conduct field inspections.

The incumbent accomplishes the functions of this position through the following staff:

Assistant Geometrics Engineer: who is responsible for developing geometric highway designs, analyzing traffic volumes, proposing access control limits, determining pavement/shoulder/median and right-of-way widths, designing horizontal/vertical alignments, design speeds, sight distance, super-elevation, and performing capacity analysis for intersections and interchanges. This position is also responsible for analyzing crash data to help determine safety program needs and serves as the district's ADA Coordinator and Pedestrian and Bicycle Coordinator.

Geometrics Technician: who prepares geometric designs according to the dictates and specifications established by the incumbent.

The incumbent exercises considerable latitude in performing the duties of this position. This incumbent's decisions are based on state and federal policies and numerous years of experience incorporating innovation, field observation, educational seminars and current literature. The incumbent recommends for approval to the Studies and Plans Engineer designs or solutions for resolving conflicting situations and highly technical problems dealing with interchange and intersection designs.

In performing the functions of this position, the incumbent deals frequently with the Region Engineer and the district Bureau Chiefs of Program Development and Operations. Other frequent contacts are made with the district Bureau Chiefs of Local Roads and Project Implementation, the Geometric Engineer in the central Bureau of Design and Environment and representatives of local agencies, consultants and the general public. This position requires frequent travel throughout the district.

The effectiveness of this position can be measured by the innovative, accurate and timely completion of assigned

tasks and the increase in the level of service afforded the motoring public by the effective use of available funds with the least adverse social and environmental consequences.

Principal Accountabilities

1. Responsible for developing geometric designs determining whether the central office review of geometrics is required prior to inclusion in reports for presentation of public hearings or informational meetings.
2. Responsible for reviewing and accepting geometric designs involving state highways prepared by consultants, local government engineers or developers.
3. Responsible for reviewing and preparing safety projects prior to submission to the safety committee for inclusion in programs.
4. Responsible for reviewing and accepting geometric revisions to projects prepared after construction contracts have been awarded.
5. Responsible for the development of access control plans where a combination of traffic volumes and land use change precipitate the need.
6. Responsible for the development of all new private and public access geometric system.
7. Serves as a Project Manager for development of plans involving safety features.
8. Trains, motivates, directs and evaluates subordinate staff.
9. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
10. Performs other duties as assigned.

Qualifications

Position Requirements

- Education/Experience:
 - Current registration as a Licensed Professional Engineer in the state of Illinois
 - Five years of experience in civil engineering
- Frequent districtwide travel

Position Desirables

- Supervisory experience
- Ability to adjust quickly to shifting priorities and manage multiple tasks simultaneously
- Ability to work well under pressure in order to meet tight deadlines
- Knowledge of design and construction practices related to highway and bridge construction
- Basic knowledge of traffic signal timing and progression
- Strong computer skills including use of excel spreadsheets, databases
- Ability to develop and maintain cooperative relationships with internal staff and external stakeholders
- Strong oral and written communication and organizational skills

Work Hours: 8:00 AM - 4:30 PM Monday - Friday

Work Location: 401 Main St Peoria, IL 61602-1267

Work Office: Office of Highways Project Implementation, Region 3/District 4/Bureau of Program Development

Agency Contact: DOT.CONTACTHR@ILLINOIS.GOV

Job Family: Transportation; Administration/Management; Sciences and Natural Resources

APPLICATION INSTRUCTIONS

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the Illinois.jobs2web.com homepage in the blue ribbon.

Non-State employees should log in on the using the "View Profile" link in the top right of the Illinois.jobs2web.com homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account.

If you have questions about how to apply, please see the following resources:

State employees: Log in to the career portal for State employees and review the Internal Candidate Application Job Aid

Non-State employees: on Illinois.jobs2web.com – click "Application Procedures" in the footer of every page of the website.

The main form of communication will be through email. Please check your "junk mail", "spam", or "other" folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- donotreply@SIL-P1.ns2cloud.com
- systems@SIL-P1.ns2cloud.com